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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,630	10/20/2003	Noboru Tsuboi	244084US3	1826
22850	7590	09/14/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			TRIEU, THERESA	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			3748	

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/687,630	<b>Applicant(s)</b> TSUBOI, NOBORU	
	<b>Examiner</b> Theresa Trieu	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is responsive to the applicant's amendment filed on July 9, 2004.

Claim 1 has been amended. Claims 4-9 have been added. Thus, claims 1-9 are pending in this application.

Applicant's cooperation in correcting the informalities in the drawing is appreciated. Applicant's cooperation in amending the claims to overcome the claim objections relating to informalities as well as indefinite claim language is also appreciated.

The arguments with respect to the references applied in the first Office Action were deemed persuasive; however, a new non-final rejection is set forth below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Olofsson et al. (Olofsson) (Patent Number 3,388,854).***

Regarding claims 1, 4 and 7, as shown in Fig. 1., Olofsson discloses a screw compressor comprising: screw rotors (6, 7); a suction/discharge side rotor shafts (12, 13; 16, 17) of the screw rotors; a suction/discharge side bearing casing (not numbered; however, clearly seen in Fig. 1); a suction side angular ball bearing (9, 11); a discharge side angular ball bearing (10, 11) rotatably

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supporting the discharge rotor shafts and being held within the discharge side bearing casing (not numbered; however, clearly seen in Fig. 1).

Regarding claims 2, 3, 5, 6, 8 and 9, Olofsson discloses a presser member (36) fixed to an end face of the suction-side bearing casing; and a spring member (35), wherein an annular gap (not numbered; however, clearly seen in Fig. 1) is formed between and suction side bearing casing and the suction-side angular ball bearing (9, 11 – see Fig. 5), and an outermost end face of an outer ring of the suction-side angular ball bearing is pressed through the spring member by means of the presser member (36); a lubricating coating is applied to an inner periphery surface of the suction side bearing casing; means (not numbered; however, clearly seen in Fig. 5) for lubricating at least one of the bearings using the fluid; means for pressing (36) the suction side rotor bearing in the thrust direction.

#### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of two patents.

Timuska (Patent Number 5,281,115) discloses a rotary screw machine having thrust balancing means.

Uchida et al. (Publication Number JP 11-210653) disclose an oiling type two stage screw compressor.

#### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 703-308-6434. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 703-308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT



Theresa Trieu  
Patent Examiner  
Art Unit 3748